

2011

**NATIONAL MUSEUMS
OF KENYA-
LAMU MUSEUMS SITES
AND MONUMENTS**

**Lamu World Heritage Site
and Conservation Office**

RE-DISCOVERING THE SOUL OF SWAHILI TRADITION: CONSERVATION OF SWAHILI-STYLE CORAL RAG HOUSE

This brief concerns the recently concluded Lamu-Hands On Conservation Workshop and Restoration Project

1. Brief Summary of the Project.

The Lamu Hands on Workshop and Restoration Project aimed at reigniting the enthusiasm of not only the Swahili people of Lamu but the Residents of the East African region as a whole on the importance of Cultural Heritage Conservation with special emphasis on the built Heritage. The overall objective is to gradually rescue the ever increasing number of extensively dilapidated stone buildings within Lamu Old Town-World Heritage Site whose owners are unable to afford the high costs associated with their restoration. The participants received theory and practical instruction on traditional techniques of coral building restoration and lime plaster. The coral rag house selected as the subject of the 2010 hands-on workshop demonstrated the conservation challenges being faced within the old town. The house is one of the few remaining historic residences within the town that is still owned and inhabited by a local family. Many others have been sold to foreign investors or abandoned by their owners.

The two-story Grade 1 listed building was in a poor state of repair. The second floor constitutes a recently added floor constructed of coral blocks laid in cement sand mortar, which was poorly executed. It offered an opportunity to effectively illustrate the problems caused by poorly executed upward extensions on historical buildings – primarily the threat it presents to the existing historic coral rag structures. Since upward extensions are allowed, it is vital that owners understand the importance of following the conservation guidelines designed by a professional conservator through the National Museums of Kenya (NMK).

The workshop and restoration project commenced on the 22nd of October 2010. During the first two weeks, the participants drawn from young local artisans were instructed on the basic theory of building conservation and its significance. For the next 5 months the building underwent intensive restoration and was stripped to the structural core replacing all the significant components that had deteriorated extensively over the years. All the timber (mangrove) ceiling joists which support the suspended floors were replaced; New electrical conduits (encased into the walls) were provided and the damaged electrical meter boxes replaced with new to reduce the risk of accidents, All electrical wiring, fittings and fixtures were also replaced with new. The restoration project also saw the installation of new Plumbing fixtures and fittings. New pipes were encased into the walls. The existing septic tanks were exhausted and disinfected. A fresh coat of lime plaster was then applied on the rehabilitated walls and new traditional Swahili style timber windows and doors provided. The restoration exercise was concluded on the 11th March 2011

2. Key Leadership Involved With The Project.

The project was overseen by the Lamu World Heritage Site and Conservation Office under the umbrella of the NMK in close collaboration with the Adventures in Preservation organization. A committee of local artisans was formed to guide and patronize the project so as to legitimize and promote its existence. The following individuals had a direct impact on the project.

Mohammed Mwenje received his basic training in Building Engineering at the Kenya Polytechnic University graduating in 1994 .In 2003, he attended the 3rd edition of the Integrated

Territorial and Urban Conservation Course conducted by ICCROM in Rome, Italy. In 2009, he participated in the International Training Programme on Conservation and Maintenance of Historic Buildings at the Lund University, Sweden

Since 2006, he has been deployed at the Lamu World Heritage Site and Conservation office as a Building Inspector. He is responsible for assisting the Site Manager in co-coordinating conservation programmes, preparing conservation plans and cost estimates for the restoration and conservation of monuments and preparation of annual state of conservation report for the world heritage site of Lamu and other selected national monuments within Lamu district. He recently presented a paper on risk reduction to the 2nd National Museums of Kenya scientific conference: namely disaster risk management and risk reduction on cultural heritage assets in Kenya. He also gave a presentation to the 2nd UNESCO World Heritage workshop on Disaster Risk Reduction to Cultural Heritage held in Acre, Israel in November 2009

Mr. Mwenje was actively involved in the project from conception acting as principal contact during the preparatory phase and was the On-Site Team Leader charged with the responsibility of coordinating the restoration and hands-on workshop. During the workshop and restoration exercise, he gave instruction on Lime manufacture, Lime plaster and Restoration of coral rag buildings In Lamu.

Haji Mohammed is an indigenous resident born, raised and working in Lamu. He received his early education in his native Matondoni village on the outskirts of Lamu town and pursued a Bachelor of Education in Technology specializing in Building and Civil Engineering at the Moi University, graduating in 1994. In 2006, he received specialized in-service training on the management of Historic Urban Landscapes at the Ritsumeikan University in Osaka, Japan. He is currently working at the Lamu World Heritage Site and Conservation Office as a Conservation Officer and has been actively engaged in conservation issues affecting the Lamu World Heritage Site for the last 6 years.

Mr Haji has been involved in the project from conception and was part of the team that drafted the initial concept paper, including conducting research and contacting potential partners. He was principal instructor during the training and gave instruction on wood curving, restoration of Swahili curved timber doors and windows, preparation of lime and best practice in Restoration of coral rag buildings. He also assisted in supervising the restoration project to its successful completion.

Mohamed Ramadhan Karama is a Research Scientist at the RISSEA, with a special interest in Swahili language and culture. He has written a Swahili language handbook for foreign students and has co authored a workbook for Swahili beginners. He is the chair of the poetry committee in the Maulidi Festival and one of the organizers of the Lamu Maulidi Cultural Festival. At RISSEA he has assisted in organizing several workshops on diverse topics: the New Lamu Port and its socioeconomic impacts, the effects of globalization on the culture of Lamu people, and the Asiatic (Shirazi) influence on the culture of Lamu.

He assisted the programme by giving the participants a history of the Swahili and the cultural aspects of the Swahili. A short course on the Swahili traditional building technology was given

to the participants to acquaint the participants with the Swahili lexicon on the programme. A guided town tour of the heritage site was also given by him to familiarize the participants with the heritage status. He assisted in initial research that led to the project and was co-convenor of the training.

Shedor Kamalkhan Kalandar is a Kenyan architect, who has broadened his knowledge by pursuing a diploma in Housing Studies from the Netherlands and Urban Land Management in Sweden. In addition, he studied Infrastructure Planning in Germany, and Philosophy and the History and Theory of Architecture in Canada. He also obtained the AFRICA Certificate in Conservation of Immoveable Heritage.

Mr. Kalandar's work experience began as the architect in charge of design and maintenance of government buildings in Coast Province, Kenya. He went on to become the head of the Conservation and Planning Unit at the National Museums of Kenya, a position he currently holds. He has been in charge of preservation and rehabilitation of historic cities in Kenya, working in UNESCO's Lamu World Heritage Site and in Old Town, Mombasa, Kenya. He has coordinated several programs that brought in both private and government funding, including the European Union-funded Programme for the Revival and Development of Swahili Culture, of which HCN's workshop is a continuation.

Owing to his vast knowledge and experience in conservation of the built environment, Mr Kamalkhan was selected as the lead expert. During the preparatory phase, he travelled to Lamu on several occasions to meet the project team giving critical advice on how to best organize the event. He also designed the course content and prepared a detailed curriculum. Unfortunately because the anticipated international participation did not materialize as planned, he was not able to travel to Lamu during the workshop, but continued to offer his advice on the restoration project.

Judith Broeker is one of the founders of Heritage Conservation Network (HCN), now renamed Adventures in Preservation (AiP). She received a Master's degree in history in 1990 with an emphasis in Historic Preservation. She completed additional coursework in materials conservation through the School of Environmental Design at the University of Colorado, and courses in Construction Management for Preservation at Colorado State University.

Ms. Broeker's experience ranges from work at a non-profit organization directed to save the historic built environment; research in a major university archive; work with the US National Park Service on National Register and HABS/HAER documentation projects; to working as a preservation specialist on materials conservation. During this time period, Ms. Broeker received specialized training by attending hands-on conferences held by Sicrat, Cornerstones, INAH, and the National Park Service on wood, adobe and lime plaster preservation technology. She also attended workshops held by Columbia University and Atkinson Noland & Associates of Boulder, Colorado on historic masonry conservation. In preparation for starting Heritage Conservation Network, she organized and held two successful pilot projects dealing with adobe, lime plaster and wood conservation.

Ms. Broeker has been the Program Director of AiP (formerly HCN) since 2002, and her organization has completed 26 successful hands-on building conservation projects between 2002

and 2008. Project locations range from the U.S. and Mexico to Sicily, Slovenia, Albania and Ghana.

The National Museums of Kenya –Lamu World Heritage Site and Conservation Office partnered with Adventures in Preservation in conceiving and developing the project, “Re-Discovering The Soul Of Swahili Tradition: Conservation Of Swahili-Style Coral Rag House”. As head of the principal partnering organization to the Lamu Hands-On Conservation Workshop, Ms. Broeker has been instrumental from the conception, immensely assisting in the drafting of the concept paper and spearheading the fundraising campaign. She provided great technical assistance to the Lamu team towards organization of the event and her contribution to the whole process has been exceptional. Even though she was unable to travel to Lamu, Ms. Broeker continued to get in touch with the Lamu team for updates on the ongoing work and offered great inspiration.

3. Project’s Primary Achievements.

1. Rescue of a Grade 1 listed building within the Lamu Old Town - World Heritage Site.
2. Re-introduction of appropriate methods for repair and maintenance of historic coral rag structures.
3. Involvement of young local artisans in the building conservation project thereby increasing enthusiasm for participating in ongoing conservation efforts.
4. Held a two-day theoretical presentation on the principles of coral rag building, including timber window and door restoration; the manufacture, slaking and preparation of lime; and the world heritage convention and its implementation.
5. Focused remaining days on teaching traditional construction and maintenance methods using a hands-on approach, which allows participants to learn and practice conservation methods while completing much-needed work on the historic house.
6. Illustrated how best upward extensions can be executed without compromising either the structural integrity of the original coral rag building or its architectural significance.
7. Demonstrated that contemporary construction techniques are generally not suitable in the restoration and preservation of historic coral rag buildings.
8. Initiated the process to gradually maintain the town’s monuments in a desired state of conservation and maintain its significant streetscape features.

4. The Project Impact.

A basic questionnaire was used to collect reactions from a cross section of the Lamu citizenry on the project at the start and days after its conclusion. The final results indicated that there is a marked change of attitude towards traditional techniques. Other issues deduced from the survey also highlight that

- There’s a calling for other indigenous philanthropists to take up the restoration exercise meaningfully
- Many understood the restoring of a building to better functional purposes

- There's is better appreciation of the Swahili culture and the need for imparting and passing traditional skills to younger generation for posterity.

Periodic inspection reports and final assessment by the Lamu World Heritage Site and Conservation Office in collaboration with the County Council of Lamu illustrate that how the entire structure was restored in accordance to the Lamu Old Town Conservation guidelines.

5. Obstacles Faced During The Project.

a) **Cancellation by International Participants.** Citing personal problems among others, all the international participants who had made reservations to take part in the hands-on workshop cancelled their participation just days to the event. Similarly, our partners from the Organization World Heritage Cities -East African Network (Zanzibar-Tanzania, Ilha de Mozambique, and Harar Jugol-Ethiopia) failed to secure scholarships for their participants even though they had made concerted efforts. However, in consultation with our partner AiP, it was resolved that we would support a number of local artisans to take part in the training programme and to be attached to the restoration exercise for the hands-on experience.

b) **Extensively Dilapidated Structure.** The object structure was more extensively dilapidated than previously estimated. Upon hacking out the old plaster and close examination, it was discovered that most of the walls had huge voids arising from rodent infestation (rats boring holes in the masonry). It was also discovered that some internal partitions, probably added at a later period after the building's construction, were actually of mud and wattle. In order to secure the structure, the affected areas were carefully treated with anti-pest chemicals and surgically restored. The entire walls were then straightened with pebble dash before being plastered over. The mud and wattle partitions were demolished and replaced with coral rag construction.

6. Activities Related to the Project.

a) Preparation and firing of demonstration kilns for lime manufacture at Manda Island

Two traditional lime-burning kilns were constructed at the Yawi quarries on Manda Island and used as teaching aids for the participants. Traditionally manufactured lime is still the most preferred and affordable lime used for construction within the settlements on Lamu island and archipelago as a whole. It is therefore prudent that the lime is manufactured in the best way for the best results, especially lime for use in the repair of old buildings. All the 16 participants led by the project team drawn from the Lamu World Heritage Site and Conservation Office (LWSCO) took part in the exercise.

The demonstration kilns were then fired up and the lime manufacture was followed through the entire process. This provided a great education for participants and was documented for use as reference material by future generations.

b) Detailed survey of the object (Selected Building)

A detailed survey of the building was conducted by the LWSCO with the assistance of two local master craftsmen with the intention of expounding in detail the proposed restoration works of

the selected object .The resultant action plan included the cost estimates and tentative time frame for undertaking the works.

c) Restoration of the coral rag building and Conservation Training in Lamu Old Town

A team of 4 master craftsmen and 12 young artisans was assembled to take part in the restoration exercise. The young artisans received instruction on the different aspects of historic building conservation and the overall significance of heritage conservation. They were then attached to the project for the next five months in which they gained invaluable experience on the restoration of Swahili stone buildings. The master craftsmen provided the necessary expertise for rehabilitating the extensively dilapidated subject building.

In November 2010, during the restoration exercise, 10 students from the School of Oriental and African Studies (SOAS) - University of London attending the study abroad programme at the Research Institute for Swahili Studies of Eastern Africa (RISSEA) –Lamu campus paid a formal visit to the restoration project. During the tour, the students were given a talk on Swahili architecture; conservation challenges facing the Lamu World Heritage Site; and the innovative programmes such as the GNLf funded project that were being devised to meet the challenges. The students had an opportunity to experience the tedious task of restoring a coral rag building.

A sixth year architecture student from the University of Nairobi, Ms Priscilla Oyuga, also had an opportunity to visit the site in December 2010. Ms Oyuga, who is conducting her research on the transformation of Swahili architecture, used the restoration project as one of the sampled buildings in the town for her final thesis.

d) Dedication

A dedication ceremony was conducted at the start of the project and was highlighted by the traditional slaughter of a goat on site to bless the exercise. Prayers were conducted by Mr Ali Salim a local cleric and member of staff at the Lamu Museums. At the end of the project the restored house was handed back to the beneficiary family at a ceremony graced by the immediate former Senior Curator of Lamu Museums Mr Mbarak Abdulqadir (currently Principal Curator Fort Jesus National Monument) and attended by the Lamu council of elders among other indigenous guests. A more elaborate dedication ceremony is planned for August 2011 during the UNESCO Workshop on Historic Urban Landscapes scheduled to take place in Lamu town and which fortunately coincides with the holy month of Ramadan making the event one of a kind.

NATIONAL MUSEUMS OF KENYA

LAMU MUSEUMS

STATEMENT OF ACCOUNTS FOR KIVUNDONI HOUSE AS AT 30TH APRIL 2011

NO	DETAILS /PARTICULARS	DR	CR
	FUNDS RECEIVED		1,625,200.00
	EXPENDITURE:		
1	PREPARATION OF LIME KILNS	152,000.00	
2	MAINTENANCE OF BUILDING	847,216.40	
3	WATER & CONSERVANCY / INSTALLATION	56,550.00	
4	CASUAL LABOUR WAGES	395,690.00	
5	TRANSPORT OF MATERIALS	10,775.00	
6	ELECTRICITY CONNECTION	27,000.00	
7	BANK CHARGES	8,300.00	
8	STATIONERY / TONNER	18,400.00	
9	ELECTRICAL INSTALLATION	129,858.80	
10	BALANCE C/D		20,590.20
		1,645,790.20	1,645,790.20
	TOTAL EXPENDITURE	1,645,790.20	
	LESS: FUNDS RECEIVED	1,625,200.00	
	BALANCE C/D		(20,590.20)